

Customer No. 24498
Atty Docket No. PU020013 US
Office Action Date: January 9, 2008

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IN THE CLAIMS:

1. (Currently amended) An asynchronous transfer mode (ATM) digital document delivery system, comprising:

a customer premise equipment (CPE) unit configured to permit a customer to order and receive a content data stream;

a buffer coupled to the customer premise equipment unit to store the content data stream before transmitting the content data stream to a customer;

a server having digital documents stored thereon for delivery to the customer through a switched ATM network;

means for controlling a data rate of the content data stream between the server and the buffer to ensure maintenance of a steady content data stream from the customer premise equipment unit to the customer during a loss of a physical layer between the server and the customer premise equipment unit, the means for controlling including a network control system coupled to the server and the customer premise equipment unit, wherein the customer premise equipment unit is configured to deliver the content data stream at a rate less than a normal rate when the physical layer is lost, and the network control system is configured for increasing the data rate of the content data stream to the customer premise equipment unit from the server for a period of time when the physical layer is restored, and a multiplexer coupled between the customer premise equipment unit and the network control system, the multiplexer including a signaling mechanism to alert at least one component that the physical layer is lost.

2. (Currently amended) The document delivery system, as recited in claim 1, wherein the customer premise equipment unit includes the buffer therein, the buffer including a memory storage capacity sufficient to maintain the content data stream to a customer for an amount of time.

3. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes time needed to restore the physical layer.

4. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes up to 30 seconds.

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5. (Cancelled)

6. (Cancelled)

7. (Previously presented) The document delivery system, as recited in claim 1, further comprising virtual circuits set up between the network control system, the customer premise unit and the multiplexer to enable communication therebetween.

8. (Currently amended) The document delivery system, as recited in claim 1, wherein the server is configured to deliver the content data stream at a rate greater than a normal rate after the physical layer has been restored.

9. (Currently amended) The document delivery system, as recited in claim 8, wherein the server is configured to deliver the content data stream at the normal rate after the buffer has been filled.

10. (Cancelled)

11. (Currently amended) A method for maintaining a content data stream over an asynchronous transfer mode (ATM) network, comprising the steps of:

providing a customer premise equipment unit configured to permit a customer to receive a content data stream;

storing a portion of the data stream in a buffer before transmitting the content data stream to a customer;

transmitting the content data stream from a server through a switched ATM network; and

controlling a data rate of the content data stream between the server and the buffer to ensure maintenance of a steady content data stream from the customer premise equipment unit to a customer during a loss of a physical layer between the server and the customer premise equipment unit, the controlling includes employing a network control system coupled to the server and the customer premise equipment unit, wherein the customer premise equipment unit is configured for delivering the content data stream at a rate less than a normal rate when the physical layer is lost, and further comprising the step of the network control system increasing the data rate of the content data stream to

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the customer premise equipment unit from the server for a period of time when the physical layer is restored,

a multiplexer coupled between the customer premise equipment unit and the network control system, and further comprising the step of: when the physical layer is lost, signaling from the multiplexer to alert at least one component that the physical layer is lost.

12. (Currently amended) The method as recited in claim 11, wherein the step of controlling a data rate of the content data stream includes maintaining an amount of data from the data stream in the buffer to continue data flow to a customer for an amount of time after the loss of the physical layer.

13. (Original) The method as recited in claim 12, wherein the amount of time includes time needed to restore the physical layer.

14. (Cancelled)

15. (Cancelled)

16. (Currently amended) The method as recited in claim 11, further comprising the step of setting up virtual circuits between the network control system, the customer premise equipment unit and the multiplexer to enable communication therebetween.

17. (Currently amended) The method as recited in claim 11, further comprising the step of delivering the content data stream from the server at a rate greater than a normal rate after the physical layer has been restored.

18. (Currently amended) The method as recited in claim 17, further comprising the step of delivering the content data stream at the normal rate after the buffer has been filled.

19. (Cancelled)